Contact: Inspector Name Regional Office Phone # Email address

Project Name:



VAR10I424

## CONSTRUCTION GENERAL PERMIT SITE INSPECTION REPORT LEVEL 2 (COMPREHENSIVE)

**Permit Number:** 

Louisa Solar (Virginia Electric & Power Co).

Project Address:		495 Chaikievei Rd. Louisa, virginia	County/City:					Louisa		
Project Operator:		See comments section.	Operator Telephone:					See comments section		
Project Contact:		Robert B. Smith, Project Manager	Contact Telephone:					804-273-3725		
Con	tact E-Mail:	Rob.smith@dom.com	Qualified Personnel (QP):					James Dorton/Regina Chavis		
Insp	ector:	Tadric Page & Kendall Allen	Weather (Wet/Dry/Rain):					Intermittent rain, cloudy, ~75 F		
Disturbed Acreage: ~174 acres In			Inspectio	Inspection Date & Time: September 27, 2016 @10:15 a.m						0:15 a.m.
Linear Project: Yes No Annual Stands. & Specs: Yes					0	٧	SMP A	uthority:	Locality	DEQ
Stag	e of Constructio	n:								
☑ Initial Clearing & Grading ☑ Rough Grading ☐ Build					g Co	onstr	uction	F	inal Grading	
	Construction of S\	WM Facilities Final Stabilization	☐ No	otice	of T	ermir	nation		Other:	
Natu	re of Project:							Re-l	nspection:	
$\boxtimes$	Public	Private State Federal	Oth	ner: _					′es ⊠No	
	co	VERAGE & POSTING REQUIREMENTS		Yes	No	N/A	Re		ng re-inspection?	
1	Construction site (9VAC25-870-31	has permit coverage? (Va. Code §62.1- 44.1 0)	5:34.A)	X			Project	authorized	by DEQ CGP VA	R10l424.
2		tice of coverage letter is posted conspicuously f the construction activity? (CGP Part II.C)	near the	X				on board at 12, 2016.	site entrance. T	he letter is dated
3		ation of the SWPPP is posted near the site's enformation for public access is provided? (9VAIII D.2 & 3)		Х			Posted	on board at	site entrance	
	SI	WPPP AVAILABILITY AND CONTENTS		Yes	No	N/A	Re		ng re-inspection?	
4		on-site <b>or</b> made available during the inspection 0VAC25-870-54.G)	? (CGP	X			SWPPI	obook mair	tained in site offic	ce.
5	The SWPPP cor (CGP Part II A.1	ntains a signed copy of the registration statemental	ent?	Х						
6	The SWPPP includes, upon receipt, a copy of the notice of coverage letter and the CGP? (CGP Part II A.1.b & c)									
7	The SWPPP includes a narrative description of the nature of the construction activity, including the function of the project? (CGP Part II A.1.d)									
The SWPPP includes a legible site plan identifying all appropriate measures and that includes the locations of support activities and the onsite rain gauge, when applicable? (CGP Part II A.1.e(1-7))										
The SWPPP contains the name, phone number and qualifications of "Qualified Personnel" conducting inspections? (CGP Part II A.6)										Chavis with AMEC ualified personnel.
10		ntains an approved erosion and sediment contr I.B)(CGP Part II.A.2)	rol plan?	X			Approv	ed by Louis	a County.	



11	The SWPPP contains an approved stormwater management plan or an existing construction site has a stormwater management plan that ensures compliance with the water quality and quantity requirements? (9VAC25-870-54.C)(CGP Part II.A.3) <b>Technical Criteria II.B</b> 🖂 <b>II.C</b>	х			
12	The SWPPP contains an adequate pollution prevention plan? (9VAC25-870-54.D)(CGP Part II.A.4)	X			
13	The SWPPP identifies impaired water(s), approved TMDL, pollutant(s) of concern, exceptional waters and the additional controls measures applicable? (9VAC 25-870-54.E)(CGP Part IIA.5 (a-b))	X			
14	The SWPPP contains the name, phone number and qualifications of "Qualified Personnel" conducting inspections? (CGP Part II A.6)	X			As noted in #9 above.
15	Delegation of Authority is provided and signed in accordance with Part III K? (CGP Part II A.7)	X			
16	The SWPPP is signed and dated in accordance with Part III K? (CGP Part II A.8)	X			
	SWPPP AMENDMENTS, MODIFICATIONS AND UPDATES	Yes	No	N/A	Reviewed during re-inspection? ☐Yes ☐No  Comments/Description
17	Is the SWPPP being amended whenever there is a change in the design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants to surface waters? (CGP Part II B(1))(9VAC25-870-54.G)	Х			Most recent amendment in SWPPP noted on September 26, 2016, appointing Mr. Rob Smith as the Project Manager with delegated authority.
18	Has the SWPPP been amended if inspections or investigations by the operator's qualified personnel, or by local, state or federal officials find that existing control measures are ineffective in minimizing pollutants in discharges? (CGP Part II B(2))(9VAC25-870-54.G)	Х			The qualified personnel conducting inspections make changes in the SWPPP when control measures are implemented and/or modified.
19	Contractor(s) that will implement and maintain each control measure are identified? (CGP Part II B(3))(9VAC25-870-54.G)	X			Various contractors are listed in the SWPPP.
20	Have there been updates to the SWPPP when any modifications to its implementation have occurred, including a record of dates when major grading activities occur, construction activities temporarily or permanently cease on a portion of the site or stabilization measures are initiated? (CGP Part II B.4(a))(9VAC25-870-54.G)	х			
21	Is there documentation in the SWPPP of replaced or modified controls? (CGP Part II B.4(b))(9VAC25-870-54.G)	X			
22	Is the SWPPP updated to indicate areas that have reached final stabilization? (CGP Part II B.4(c))(9VAC25-870-54.G)			X	
23	Is the SWPPP updated to indicate properties that are no longer under the legal control of the operator and the dates on which the operator no longer had legal control over each property? (CGP Part II B.4(d))(9VAC25-870-54.G)			X	
24	Does the SWPPP identify the date of any prohibited discharges, the volume released, actions taken to minimize the impact of the release and measures taken to prevent the recurrence of any prohibited discharge? (CGP Part II B.4(e-f))(9VAC25-870-54.G)	Х			
	Amendments, modifications, or updates to the SWPPP are signed in accordance with Part III K? (CGP Part II B(5))(9VAC25-870-54.G)	Х			
	INSPECTIONS AND CORRECTIVE ACTIONS	Yes	No	N/A	Reviewed during re-inspection? ☐Yes ☐No  Comments/Description
26	Inspections required by the SWPPP are conducted at the required frequency, including a modified frequency for impaired water(s), approved TMDL(s), and exceptional waters when applicable? (CGP Part II F (2)) (CGP Part II A.5.b.3)	X			



			1		
27	Inspection reports are completed and signed in accordance with CGP Part II F (3-4)? (CGP Part II F (3-4))	X			
28	Corrective actions are taken consistent with the requirements of the CGP? (CGP Part II $G(1-2)$ )	X			Corrective actions are noted in the SWPPP and detailed in the VSMP logbook on-site.
	ESC AND SWM PLAN IMPLEMENTATION	Yes	No	N/A	Reviewed during re-inspection?  ☐Yes ☐No  Comments/Description
29	Sequencing of the project is implemented in accordance with the approved erosion and sediment control plan and stormwater management plans? (9VAC25-870-54.B and C)	X			
30	Have all denuded areas requiring temporary or permanent stabilization been stabilized, and have stabilization requirements for impaired waters, approved TMDL(s), pollutants of concern and exceptional waters, when applicable, been met? (9VAC 25-840-40.1) (9VAC25-870-54.B) (9VAC25-880-60) (CGP Part I F.1(a)) (CGP Part II A.5.b(1)) (CGP Part II A.2.c (8)) (CGP II E(1-2))	X			The project area is currently being cleared and graded; however, those areas requiring stabilization have had seed and straw applied and/or other stabilization methods have been employed (jute matt and seeding, etc).
31	Are soil stockpiles adequately stabilized with seeding and/or protected with sediment trapping measures? (9VAC 25-840-40.2) (CGP Part II A.2(c)) (9VAC25-870-54.B)			X	No soil stockpiles noted onsite.
32	A permanent vegetative cover has been established that is uniform, mature enough to survive and will inhibit erosion? (9VAC 25-840-40.3) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)			Х	Site remains under development.
33	Have sediment trapping facilities been constructed as the first step in land disturbance activities? (9VAC 25-840-40.4) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)	X			Site reportedly has 9 stormwater ponds that have not been converted. In addition, silt fence and straw bales have been installed at the site to help control sediment discharges.
34	Have earthen structures been stabilized immediately after installation? (9VAC 25-840-40.5) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)	х			DEQ observed several areas at the site where grass was either growing or planted, and DEQ observed that jute matts have been installed around the stormwater ponds and other areas of the site.
35	Are sediment traps and basins installed in accordance with MS-6 and the approved plan? (9VAC 25-840-40.6) (CGP Part II A.2.c (9)) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)	Х			The stormwater ponds installed at the site appeared adequate to help control runoff from the areas they are intended to serve. At the time of inspection, DEQ did not observe any sediment traps on-site; however, DEQ observed areas of the site where sediment traps would be effective in controlling sediment runoff. The inspection contacts indicated that they planned to construct sediment traps in specific areas of the site.
36	Are finished cut and fill slopes adequately stabilized to prevent or correct excessive erosion? (9VAC 25-840-40.7) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)			X	
37	Is concentrated runoff down cut or fill slopes contained in an adequate permanent or temporary structure? (9VAC 25-840-40.8) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)		х		DEQ observed a slope between stormwater pond #8 and the stream crossing identified by the site contacts as crossing #1. DEQ observed sediment laden water accumulated in the areas just above the uphill corner slope of the stream crossing. This area was reportedly impacted by Stormwater runoff from the uphill area above the crossing.
38	Is adequate drainage or other protection provided for water seeps? (9VAC 25-840-40.9) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)			X	
39	Do all operational storm sewer inlets have adequate inlet protection? (9VAC 25-840-40.10) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)			X	



					DEQ observed a stormwater conveyance channel at
40	Are stormwater conveyance channels adequately stabilized with channel lining and/or outlet protection? (9VAC 25-840-40.11) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)		X		the site that did not appear adequately protected. The channel is located in area 2 at the site (identified by the site contacts) and appeared to be unprotected. The channel discharges into rock pile. There is a silt fence approximately 10-feet behind the rock pile, and the area in between the dam and the silt fence contained several feet of standing water at the time of inspection (see digital photographs below). The site contacts stated that they planned to construct a sediment trap in this area in accordance with MS-6.
41	Is in-stream construction conducted using measures to minimize channel damage? (9VAC 25-840-40.12) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)				DEQ did not observe any in-stream construction at the site. Note: Two stream-crossings have been constructed at the site and are being utilized.
42	Are temporary stream crossings of non-erodible material installed where applicable? (9VAC 25-840-40.13) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)	Х			
43	Is necessary restabilization of in-stream construction complete? (9VAC 25-840-40.15) (CGP II E(1-2)) (9VAC25-870-54.B)			X	
44	Are utility trench operations conducted and stabilized in accordance with MS-16? (9VAC 25-840-40.16) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)			Х	
45	Are soil and mud kept off paved or public roads to minimize the transport of sediment? (9VAC 25-840-40.17) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)	Х			The public roads beyond the construction area appeared clean and clear of debris.
46	Have all temporary control structures that are no longer needed been removed and disturbed soil resulting from their removal permanently stabilized? (9VAC 25-840-40.18) (CGP Part II A.2(c)) (CGP II E(1-2)) (9VAC25-870-54.B)			Х	
47	Are properties and waterways downstream from development adequately protected from erosion, sediment and damage in accordance with the standards and criteria specified by 9VAC25-840.19(a-n)? (9VAC 25-840-40.19(a-n))		х		During the inspection, DEQ observed areas at the site where it appeared that sediment had been discharged beyond some sections of the silt fences at the site. In addition, Dominion self-reported sediment discharges to the creek at the site. (Stream-crossings 1&2 - September 20, 2016 email).
48	Permanent control measures included in the SWPPP are in place? (9VAC25-870-54.C) (9VAC25-880-60) (CGP Part II F.1(a))	Х			
	POLLUTION PREVENTION PLAN IMPLEMENTATION	Yes	No	N/A	Reviewed during re-inspection?  ☐Yes ☐No  Comments/Description
49	Practices are in place to prevent and respond to leaks, spills, and other releases including (i) procedures for expeditiously stopping, containing, and cleaning up spills, leaks, and other releases; and (ii) procedures for reporting leaks, spills, and other releases in accordance with Part III G? (CGP Part II A.4.e(1))(9VAC25-870-56)	X			Details are provided in the sites pollution prevention plan.
50	Practices are in place to prevent the discharge of spilled and leaked fuels and chemicals from vehicle fueling and maintenance activities? (CGP Part II A.4.e(2))(9VAC25-870-56)	X			DEQ observed that aboveground fuel storage tanks at the site were protected by spill containment barriers.
51	Practices are in place to prevent the discharge of soaps, solvents, detergents, and wash water from construction materials, including the clean-up of stucco, paint, form release oils, and curing compounds? (CGP Part II A.4.e(3))(9VAC25-870-56)			Х	
52	Practices are in place to minimize the discharge of pollutants from vehicle and equipment washing, wheel wash water, and other types of washing? (CGP Part II A.4.e(4))(9VAC25-870-56)	X			DEQ observed what appeared to be a designated vehicle wash area at the site. In addition, DEQ observed an area at the site, near the front entrance, where a liner has been installed on the ground.

Contact: Inspector Name Regional Office Phone # Email address



					Vehicles were observed parked on this barrier.
53	Concrete wash water is directed into a leak-proof container or leak-proof settling basin? (CGP Part II A.4.e(5))(9VAC25-870-56)	X			Digital photograph obtained.
54	Practices are in place to minimize the discharge of pollutants from storage, handling, and disposal of construction products, materials, and wastes? (CGP Part II A.4.e(6))(9VAC25-870-56)			X	
55	Practices are in place to prevent the discharge of fuels, oils, and other petroleum products, hazardous or toxic wastes, and sanitary wastes? (CGP Part II A.4.e(7)(9VAC25-870-56)	X			Portable toilets, construction dumpsters, fuel tank storage enclosures, drip matts (for stationary vehicle parking), etc. were noted on-site.
56	Practices are in place to minimize any other discharge from the potential pollutant-generating activities not addressed above, when applicable? (CGP Part II A.4.e(8))(9VAC25-870-56)	X			
	SITE EVALUATION AND AGENCY RECOMMENDATION	Vos	No	AI/A	Request for Corrective Action attached:  ☐ Yes☐ No
	SITE EVALUATION AND AGENCE RECOmmendation	763	NO	N/A	Comments/Description
57	Measures have been taken to prevent adverse impact(s) to receiving waters? (CGP Part I B.6)( Part I G.1)(Part II G.2)(Part II A.4.e(1-6))	X	No		Comments/Description Silt fences, straw bales, stormwater ponds, etc. have
57	Measures have been taken to prevent adverse impact(s) to receiving		X		Comments/Description  Silt fences, straw bales, stormwater ponds, etc. have been constructed at the site to help prevent impacts to receiving waters. Note: As noted elsewhere in this Report, it appeared to DEQ that additional control measures, such as rock-check dams, sediment traps, etc. may be implemented to minimize discharges of
	Measures have been taken to prevent adverse impact(s) to receiving waters? (CGP Part I B.6)( Part I G.1)(Part II G.2)(Part II A.4.e(1-6))  VA DEQ's Risk Based Inspection Strategy has been satisfied. No local VSMP Authority or comprehensive DEQ re-inspection is required at this	X			Comments/Description  Silt fences, straw bales, stormwater ponds, etc. have been constructed at the site to help prevent impacts to receiving waters. Note: As noted elsewhere in this Report, it appeared to DEQ that additional control measures, such as rock-check dams, sediment traps, etc. may be implemented to minimize discharges of sediment to receiving waters.

## September 27, 2016

## CONSTRUCTION GENERAL PERMIT SITE INSPECTION REPORT REQUEST FOR CORRECTIVE ACTION

Project Name: Louisa Solar Permit Number: VAR10I424 Date: September 27, 2016

Checklist #	Regulatory Citation/Legal requirement <sup>1</sup>	Occurrence	Observation/Recommended Corrective Action
37	9VAC25-840-40.8	1	Observation: At the time of inspection, DEQ observed that runoff from the sloped area (swale) between the Stormwater pond #8 and the stream crossing #1 is not being contained adequately.  Recommended Corrective Action: 9VAC25-840-40.8 requires that "concentrated runoff shall not flow down cut or fill slopes unless contained within an adequate temporary or permanent channel, flume or slope drain structure".

<sup>&</sup>lt;sup>1</sup> Refers to applicable regulation found in the most recent publication of the State Water Control Law (Va. Code § 62.1-44.2 et seq.), Virginia Erosion and Sediment Control Regulations (9VAC25-840), the Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870), or the General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880).

Page 5 of 9 00032885



40	9VAC25-840-40.11	1	Observation: At the time of inspection, DEQ observed a Stormwater conveyance channel that appeared to be unlined and unprotected. The channel discharges into a rock-pile. Beyond the rock pile, water, sediment and debris collects behind a silt fence that is located approximately 10 feet behind the rock pile.  Recommended Corrective Action: 9VAC25-840-40.11 requires that "before newly constructed stormwater conveyance channels or pipes are made operational, adequate outlet protection and any required temporary or permanent channel lining shall be installed in both the conveyance channel and receiving channel".
47	9VAC25-840-19(a-n)	1	Observation: At the time of inspection, DEQ observed areas at the site where sediment appeared to have discharged beyond the silt fences installed.  Recommended Corrective Action: 9VAC25-840-19 requires that "properties and waterways downstream from development sites shall be protected from sediment deposition, erosion and damage due to increases in volume, velocity and peak flow rate of stormwater runoff for the stated frequency storm of 24-hour duration in accordance with the following standards and criteria. Stream restoration and relocation projects that incorporate natural channel design concepts are not manmade channels and shall be exempt from any flow rate capacity and velocity requirements for natural or man-made channels". See sections a-n of the minimum standard for further details.

Comments: At the time of inspection, DEQ noted the following deficiencies:

- 1. Silt Fence (Fig 1 & 2): DEQ observed a section of silt fence that was not properly staked in accordance with standard and specification 3.05. It appeared that the staking of this section of silt fence was more than six feet in length. Note: DEQ observed what appeared to be a sediment discharge in the area the silt fence appeared to be intended to protect. Note: Site staff corrected this deficiency before DEQ departed the site.
- 2. Inlet/outlet protection (Fig 3): The inlets & outlets of both culvert pipes associated with the stream-crossings appeared inadequately protected. The inlets/outlets appeared to contain sediment that covered some of the existing riprap, and the visible riprap did not appear installed and/or positioned adequately to protect the outlet and inlets. Note: Post the inspection, DEQ confirmed with Ms. Camille Cook, Dominion Environmental Services, that cleanout of these areas can be conducted in accordance with the applicable Nationwide Permit issued by the Core of Engineers (Nation 51, according to Ms. Cook).
- 3. As noted in checklist item #40, DEQ observed a stormwater conveyance channel constructed at the site that discharged to a rock structure and silt fence. Based on DEQ's observations, it appeared that the conveyance channel was not adequately protected and the area subject to discharges did not appear to be constructed correctly. The inspection contacts indicated that they planned to construct a sediment trap in this area, in accordance with standard and specification 3.13 (See Fig 4 & 5).
- 4. As noted in checklist item #37, DEQ observed a sloped area (swale) in between the stormwater pond #8 and the stream-crossing #1 (designations identified by site staff). The outlet (downhill area) of the stormwater pond appeared unprotected. It appeared that water discharges over the berm of the basin when full. The downstream area beyond the discharge, leads to the corner of the stream-crossing #1. A super silt fence is installed to help protect the stream and adjacent areas from discharges from the subject basin. At the time of inspection, DEQ observed a large volume of accumulated standing water and debris at the super silt fence. DEQ observed rock piles and wood mulch installed above the stream-crossing area that appeared to be intended to control the flow of water to the stream-crossing area. The installed rocks and mulch did not appear adequate to protect the subject area. Note: Dominion previously reported that the creek associated with the crossing, and the adjacent areas, have been subject to sediment discharges from silt fence failures, etc. (see Fig 6, 7 & 8).

DEQ discussed the deficiencies with the site contacts at the time of inspection, and Mr. Smith agreed to correct all deficiencies at the site no later than October 4, 2016. DEQ plans to conduct a re-inspection at the site on October 6, 2016.

Contact: Inspector Name Regional Office Phone # Email address



Recommended Corrective Action Deadline: October 4, 2016

Targeted Re-Inspection Date: October 6, 2016

The recommended corrective action deadline date applies to <u>all conditions</u> noted on this report unless otherwise noted. If listed condition(s) currently constitute non-compliance and/or corrective actions are not completed by the deadline, other enforcement actions may be issued to the entity responsible for ensuring compliance on the above project.

Inspector Signature:

Scher Serge September 27, 2016.



## **CONSTRUCTION GENERAL PERMIT SITE INSPECTION PHOTO LOG**

Project Name: Louisa Solar Permit Number: VAR10I424 Date: September 27, 2016



Fig. 2 showing sediment release behind silt fence shown in Fig 1.



Fig. 3 showing inadequate outlet protection at stream-crossing.



Fig. 4 showing unprotected Stormwater conveyance channel.



Fig. 5 showing sediment trapping area at end of conveyance channel (Fig 4). The sediment trapping area should be constructed in accordance with standard & specification 3.13.



Fig. 7 showing sediment laden water and debris in between basin #8 and stream-crossing #1.



Fig. 6 showing upslope area between stream-crossing #1 and Stormwater pond #8.



Fig. 8 showing upslope area to stream (note sediment laden water beyond silt fence).

